

Lockheed Martin IS&GS – Civil  
Energy & Environment  
ESAT Region 3  
US EPA Environmental Science Center  
701 Mapes Road Ft. Meade, MD 20755-5350  
Telephone 410-305-3037 Facsimile 410-305-3597



**Date:** February 23, 2012

**Subject:** Organic Data Validation (M3 Level)  
Case: R33917  
Project: 480-15712-1  
Site: Dimock

**From:**

**Ex. 4 - CBI**

**To:** Colleen Walling  
ESAT Region 3 Project Officer

### **OVERVIEW**

Third party Case R33917, Project 480-15712-1, consisted of nineteen (19) aqueous samples including one (1) field blank analyzed for ethylene glycol, diethylene glycol, triethylene glycol, 2-methoxyethanol and 2-ethoxyethanol. Samples were analyzed by TestAmerica Buffalo (TAL BUF) according to Test Methods for Evaluating Solid Waste SW-846 Method 8015B.

### **SUMMARY**

Data were validated according to Region 3 Modifications to the National Functional Guidelines for Organic Data Review, Level M3 and is assigned the Superfund Data Validation Label S4VM (Stage\_4\_Validation\_Manual). Areas of concern with respect to data usability are listed below.

### **MAJOR PROBLEM**

- Peaks were detected in the GC/FID Method 8015B glycols analysis within the retention time window of target compounds diethylene glycol and triethylene glycol. However, the positive identification of these target compounds was not confirmed via second GC column and/or GC/MS analysis. For this reason, the target compounds were qualified "R" on the Data Summary Forms (DSFs) as their absolute identity could not be proven.

### **MINOR PROBLEM**

- The laboratory employed a four (4) point calibration curve for the analysis of the compounds requested; however, Method 8015B specifies the use of a five (5) point curve. No action was taken by the reviewer based on this deviation from the method.

### **NOTES**

- Reported recoveries and Relative Percent Differences (RPDs) in Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) analyses and Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses of sample HW34a were within control limits.
- The calibration factors calculated by the reviewer were slightly different than those calculated by the laboratory. Results calculated using these calibration factors were within rounding errors from laboratory and data validation results.

### **ATTACHMENTS**

Appendix A – Glossary of Data Qualifier Codes

Appendix B – Data Summary Form(s)

Appendix C – Chain of Custody Records

Appendix D – Laboratory Case Narrative

DCN: R33917\_480-15712-1